

REMARKS

This Amendment is submitted in response to the non-final Office Action mailed on February 26, 2009. Claims 24 to 49 are pending in this application. Claims 1-23 were previously canceled without prejudice or disclaimer. Applicant has amended Claims 24, 37, and 39. These amendments do not add new matter. A Supplemental Information Disclosure Statement is submitted with this response. The Director is authorized to charge any fees which may be required in connection with this response and this Supplemental Information Disclosure Statement, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 0112857-00505 on the account statement.

Claim Rejections Under 35 U.S.C. § 103

The Office Action rejected Claims 24, 25, 28 to 30, 37 to 40, and 43 to 45 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,475,271 to Shibasaki et al. ("Shibasaki") in view of U.S. Patent No. 6,555,989 to Pearson ("Pearson"). Applicant respectfully disagrees and submits that, even if combinable, the cited references fail to disclose or suggest each and every element of these claims. Nevertheless, Applicant has amended certain of these claims for clarity.

Amended independent Claim 24 recites, in part, "electronic equipment comprising a power source connected to the body via a predetermined bus, including a secondary battery, secondary battery control means for controlling the secondary battery, a fuel cell which causes a predetermined fuel and air to electrochemically react with each other so as to cause a power generating unit to generate power, and fuel cell control means for controlling the fuel cell, wherein the secondary battery control means and the fuel cell control means mutually transfer at least remaining secondary battery power information indicative of an amount of power remaining in the secondary battery and a fuel cell status information indicative of a status of the fuel cell, to each other via the bus." (Emphasis added).

Applicant submits that Shibasaki and Pearson, alone or in combination, fail to disclose or suggest that the secondary battery control means and the fuel cell control means mutually transfer at least remaining secondary battery power information and a fuel cell status information to each other via the bus as required, in part, by amended independent Claim 24. The Patent Office admits that Shibasaki does not disclose: (1) a fuel cell or a fuel cell control means, or (2)

that the secondary battery control means and the fuel cell control means mutually transfer information to each other. See, Office Action, page 3, lines 7 to 11. Instead, the Patent Office relies on Pearson for the claimed elements, asserting that “Pearson is evidence that ordinary workers in the art would find a reason, suggestion or motivation to include in the power source equipment for the electronic device a back up and load leveler hybrid fuel cell battery.” See, Office Action, page 4, lines 5 to 7. However, the portion of Pearson relied on by the Patent Office merely discloses a fuel cell stack and rechargeable storage battery coupled together via a DC-DC current converter. See, Pearson, Abstract, lines 1-3; column 4, lines 7-10. As in “typical hybrid systems,” the fuel cell and storage battery are electrically connected across the inputs and outputs of the DC-DC converter. See, Pearson, column 1, lines 38-43. Thus, the DC-DC current converter “advantageously ☐ electrically isolate[s] the fuel cell from the storage battery.” Nothing in Pearson discloses or suggests that the fuel cell and secondary battery are connected to a bus and mutually communicate or transfer data to each other via the bus.

The Patent Office asserts that Pearson discloses a secondary battery control means and a fuel cell control means that mutually transfer remaining secondary battery power information and fuel cell status information to each other via signals sent through a bus. See, Office Action, page 4, lines 12-17. However, the portion of Pearson relied on by the Patent Office merely discloses that certain signals indicative of the desired current output, the charge flowing through the battery, and the desired current for the battery “are provided” to the charge controller and the fuel cell supply subsystem. See, Pearson, column 5, lines 2-3 and 58-67. Nothing in Pearson discloses or suggests that the signals are mutually transferred between the secondary battery control means and the fuel cell control means via a bus. In fact, the signal indicative of the desired output current of the DC-DC converter “is provided by computing unit 63 to reactant supply subsystem 10,” rather than transferred to subsystem 10 by the charge controller. See, Pearson, column 5, lines 64-67. Furthermore, the signal indicative of the charge flowing through the battery is provided to the charge controller from an ammeter. See, Pearson, column 5, lines 58-60. Likewise, signals 67 and 69 cited by the Patent Office are provided to the computer unit from the charge controller and the ammeter. See, Pearson, column 5, lines 60-64. Nothing in Pearson discloses or suggests that information is mutually transferred between the secondary battery control means and the fuel cell control means.

Moreover, Pearson does not disclose the use of a bus to transfer such information. Instead, Pearson is entirely directed to a system that requires the use of several instruments, such as an ammeter, as well as the computer unit and a DC-DC converter, to transfer information to and from the fuel cell control means and the secondary battery control means. See, Pearson, column 5, lines 2-67. Therefore, Pearson fails to disclose that the secondary battery control means and the fuel cell control means mutually transfer data to each other via a bus.

Accordingly, unlike the electronic equipment of amended independent Claim 24, Shibasaki and Pearson, alone or in combination, fail to disclose or suggest that the secondary battery control means and the fuel cell control means mutually transfer at least remaining secondary battery power information and a fuel cell status information to each other via the bus. Moreover, it would not have been obvious to one having ordinary skill in the art to have modified Shibasaki with Pearson to arrive at such electronic equipment without reasonably being construed as impermissible hindsight reconstruction.

For at least these reasons, amended independent Claim 24 is patentably distinguished over these references and is in condition for allowance. Claims 25, and 28 to 30 depend directly from amended independent Claim 24, and are allowable for similar reasons, and because of the additional features recited in these claims.

Amended independent Claims 37 and 39 recite certain similar features as amended independent Claim 24, and are allowable for similar reasons as given above with respect to this claim. Claims 38, 40, and 43 to 45 depend from Claims 37 and 39 and are allowable for similar reasons, and because of the additional features recited in these claims.

The Office Action rejected Claims 26, 27, 36, 41, 42, and 46 under 35 U.S.C. §103(a) as being unpatentable over Shibasaki in view of Pearson and further in view of U.S. Patent No. 6,069,465 to de Boois et al. ("de Boois"). Applicant respectfully disagrees with, and traverses, these rejections.

As discussed above with respect to amended independent Claim 24, Shibasaki and Pearson fail to disclose or suggest, at a minimum, that the secondary battery control means and the fuel cell control means mutually transfer at least remaining secondary battery power information and a fuel cell status information to each other via the bus. The Patent Office relies on de Boois merely as support for a fuel cell control means which sets a plurality of operating

modes for the fuel cell as required, in part, by Claims 26, 27, 36, 41, 42, and 46. See, Office Action, page 10, line 10 to page 11, line 2. Applicant therefore respectfully submits that, even if properly combinable, de Boois fails to cure the deficiencies of Shibasaki and Pearson with respect to the present claims. Moreover, it would not have been obvious to one having ordinary skill in the art to have modified Shibasaki with Pearson, and further with de Boois to arrive at such electronic equipment without reasonably being construed as impermissible hindsight reasoning.

Furthermore, Applicant submits that de Boois is not analogous prior art that may be properly relied on as a reference under 35 U.S.C. §103. Section 4141.01(a) of the MPEP states:

[t]he examiner must determine what is “analogous prior art” for the purpose of analyzing the obviousness of the subject matter at issue. “Under the correct analysis, any need or problem known in the field of endeavor at the time of the invention and addressed by the patent [or application at issue] can provide a reason for combining the elements in the manner claimed.” *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1397 (2007). Thus a reference in a field different from that of applicant’s endeavor may be reasonably pertinent if it is one which, because of the matter with which it deals, logically would have commended itself to an inventor’s attention in considering his or her invention as a whole.

Applicant respectfully submits that a controller for controlling positions of window blinds is not a field that logically would have commended itself to an inventor’s attention when the inventor is considering electronic equipment that controls a fuel cell and a secondary battery for powering a processing means, and modes of operating the fuel cell relative the battery based on power levels required by the processing means. That is, an inventor would not be drawn to the field of window blinds and lights (or even the control of such window blinds and lights) when considering the problems controlling power supplied to a processing means (such as a PC processor).

For at least these reasons, Claims 26, 27, 36, 41, 42, and 46 are patentably distinguished over these references and are in condition for allowance.

The Office Action rejected Claims 35, and 47 to 49 under 35 U.S.C. § 103(a) as being unpatentable over Shibasaki in view of Pearson, and further in view of U.S. Patent No. 6,104,162 to Sainsbury et al. (“Sainsbury”). Applicant respectfully disagrees with, and traverses, these rejections.

As discussed above with respect to amended independent Claim 24, Shibasaki and Pearson fail to disclose or suggest, at a minimum, that the secondary battery control means and the fuel cell control means mutually transfer at least remaining secondary battery power information and a fuel cell status information to each other via the bus. The Patent Office relies on Sainsbury merely for disclosure of “a multifunctional battery module (19) including battery unit (41) consisting of one or a combination of battery and fuel cell units.” See, Office Action, page 11, lines 10 to 16. Applicant therefore respectfully submits that, even if properly combinable, Sainsbury fails to cure the deficiencies of Shibasaki and Pearson with respect to the present claims. Moreover, it would not have been obvious to one having ordinary skill in the art to have modified Shibasaki with Pearson, and further with Sainsbury to arrive at such electronic equipment without reasonably being construed as impermissible hindsight reasoning.

For at least these reasons, Claims 35, and 47 to 49 are patentably distinguished over these references and are in condition for allowance.

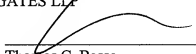
For the foregoing reasons, Applicants respectfully submit that the present application is in condition for allowance and earnestly solicit reconsideration of same.

The Commissioner is hereby authorized to charge deposit account 02-1818 for any fees which are due and owing. If such a withdrawal is made, please indicate the Attorney Docket No. 0112857-00505 on the account statement.

Respectfully submitted,

K&L GATES LLP

BY



Thomas C. Basso
Reg. No. 46,541
Customer No. 29175

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